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**Abstract of the Disclosure**

The present invention provides for a system and two methods for forming electrically conductive pathways. These pathways can be connected with a microchip in order to form a radio frequency identification tag. A first method uses a thermal transfer ribbon, coated with a conductive material that is engaged with a receiver substrate. A thermal print head will heat a composition on the thermal transfer ribbon in order to transfer it to the receiver substrate. This transfer composition forms the electrically conductive pathway or antenna. In an alternative method, a receiver substrate is heated in order to react conductive material thereon. This receiver substrate is also heated by a thermal print head to form an electrically conductive pathway.